

Fact Sheet

SEARCH for Diabetes in Youth

When diabetes strikes during childhood, it is routinely assumed to be type 1, or juvenile-onset, diabetes. However, in the last 2 decades, type 2 diabetes, formerly known as adult-onset diabetes, has been reported among U.S. children and adolescents with increasing frequency. Also, studies conducted in Europe showed an increase in the frequency of type 1 diabetes, especially in young children. It is unclear whether the frequency of type 1 diabetes is also increasing among U.S. youth.

In response to this growing public health concern, the Centers for Disease Control and Prevention (CDC) and the National Institutes of Health (NIH) are funding a 5-year, multicenter study, **SEARCH for Diabetes in Youth**, to examine the current status of diabetes among children and adolescents in the United States.

SEARCH Facts

The primary goals of SEARCH are

to develop a uniform classification of types of childhood diabetes (no "gold standard" definitions of types now exist)

to estimate the number of new (incidence) and existing (prevalence) childhood diabetes cases by type, age of the child, sex, and racial or ethnic group

to describe the clinical characteristics of different types of diabetes in youth and how they evolved

to describe the complications of diabetes in children and adolescents

to describe the quality of life of children and adolescents with diabetes

Six U.S. sites that are collaborating with CDC and NIH on SEARCH follow:

Kaiser Permanente Southern California, Pasadena, CA University of Colorado Health Sciences Center, Denver, CO Pacific Health Research Institute, Honolulu, HI Children's Hospital Medical Center, Cincinnati, OH University of South Carolina School of Public Health, Columbia, SC Children's Hospital & Regional Medical Center, Seattle, WA

- The coordinating center for the study is located at Wake Forest University in North Carolina, and Northwest Lipid Research Laboratories in Seattle, Washington — central laboratory.
- The youth population being studied is provided by the six SEARCH sites and involves more than 5 million, or 6 percent, of all American children aged 0 to 19 years. This will be the largest and most racially and geographically diverse study group ever involved in a youth diabetes study.
- During the 5-year study period, the SEARCH sites will examine more than 6,000 existing cases of pediatric diabetes and about 800 new cases each year. Data collection began in 2002.
- With data provided by the SEARCH study, scientists can follow current cases of childhood diabetes to monitor any changes that occur in the type, characteristics, and outcomes of specific cases.
- The data collection of childhood diabetes cases will provide valuable information to researchers and health care providers in developing appropriate care and treatment protocols that will reduce the likelihood of complications and lessen the burden of diabetes in the daily lives of children and adolescents with diabetes.

Diabetes Facts

- Diabetes is one of the most common chronic diseases among children in the United States. About 150,000 young people under 18 years — or about one in every 400 to 500 — have diabetes.
- People with diabetes are at great risk of developing serious health complications over time, such as heart disease, kidney disease, blindness, and stroke.
- Type 1 diabetes develops when the body's immune system destroys pancreatic cells that make the hormone insulin that regulates blood sugar. It normally strikes children and young adults. People with type 1 diabetes must have daily insulin injections to survive.
- Each year, more than 13,000 young people are diagnosed with type 1 diabetes.
- Type 2 diabetes begins when the body develops a resistance to insulin and no

longer uses the insulin properly. As the need for insulin rises, the pancreas gradually loses its ability to produce sufficient amounts of insulin to regulate blood sugar.

- Health care providers are finding more and more children with type 2 diabetes, a disease usually diagnosed in adult aged 40 years or older.
- Children who develop type 2 diabetes are typically overweight or obese and have a family history of the disease. Most are American Indian, African American, Asian, or Hispanic/Latino.
- No data currently exist to determine the extent to which type 2 diabetes has emerged among U.S. children and adolescents, but researchers at CDC estimate that among new cases of childhood diabetes, the proportion of those with type 2 diabetes ranges between 8 percent and 43 percent.

For More Information

 More information on the SEARCH for Diabetes in Youth study is available on the Web at

http://www.searchfordiabetes.org

• More information on childhood diabetes is available at these Web sites:

http://www.cdc.gov/diabetes/

http://www.cdc.gov/diabetes/pubs/estimates.htm http://www.cdc.gov/diabetes/projects/diab_child.htm

http://www.niddk.nih.gov/ http://www.jdrf.org/index.php http://www.diabetes.org